

REMARKS/ARGUMENTS

The Office Action mailed August 22, 2007 has been received and the Examiner's comments carefully reviewed. The Office Action rejected claims 1-64. Claims 1, 13, 19, 28, 34, 40, 50 and 51 have been amended. No new matter has been added. For at least the following reasons, Applicants respectfully submit that the presently pending claims are in condition for allowance.

Examiner Interview – October 30, 2007

A telephonic interview was held on August 30, 2007. The Applicants thank Examiner Anya for his time. During the interview, a brief background was provided and the art of record as applied to Claim 1 was discussed. An agreement as to allowability was not reached. Applicants agreed to further amend the claims to clarify the invention.

Rejections

Claims 1-32, 34-38, 40-49 and 51-64 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,721,740 81 to Skinner et al. in view of U.S. Pat. No. 6,553,412 81 to Kloba et al. Claim 33 was rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,721,740 81 to Skinner et al. in view of U.S. Pat. No. 6,553,412 81 to Kloba et al., as applied to claims 1, 40 or 51 above and further in view of U.S. Pub. No. 2003/0051068 A 1 to Eldridge et al. Claim 39 was rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,721,740 81 to Skinner et al. in view of U.S. Pat. No. 6,553,412 81 to Kloba et al., as applied to claims 1, 40 or 51 above and further in view of U.S. Pat. No.

6,941,326 82 to Kadyk et al. Claim 50 was rejected under 35 U.S.C. 103 {a) as being unpatentable over U.S. Pat. No. 6,553,412 81 to Kloba et al. in view of U.S. Pat. No. 1,099,926 81 to Ims et al. The Applicants respectfully disagree but have amended the claims to more clearly define the invention.

As amended, Claim 1 recites in part “establishing a notification bond with the server, the notification bond enabling the client to obtain a notification from the server in response to an object related event associated with the original object; wherein the notification bond remains persistent through a reboot of the client and server and the object related event is associated with an edit of the original object; and wherein each object includes a notification bond.” In contrast, Kloba teaches a notification module that notifies a client when an activity related event occurs.

The Office Action states: “Skinner is silent with reference to the notification bond remaining persistent through a reboot of the client and server. Kloba teaches the notification bond remaining persistent through a reboot of the client and server (“...sync operation...” Col. 5 Ln. 36 - 59, Notification Module 132 Col. 10 Ln. 9 - 28).” (Office Action, page 3).

Kloba describes a “notification module 132 sends objects to clients 108 beyond objects related to channels associated with clients 108. Such objects could be requested by client 108 in advance. For example, a client 108 could ask for a notification *when an event happens, such as when a stock reaches a target price*. When the event occurs, the notification module 132 would cause an appropriate notification(s)/object(s) to be sent to the client 108. Alternatively, the notification module 132 may send objects to clients 108 without any prior explicit request from the client 108. For example, the notification module 132 might send channels to clients 108

when such channels are identified to be similar to those already selected by the clients 108. Also, the notification module 132 might send appropriate notifications/objects to the clients 108 *when such clients 108 receive email or faxes* at the server 104. In embodiments, the notification module 132 transmits such objects to the client 108 immediately when the event occurs, during the next synchronization with the client 108, or at some other future synchronization.” (Kloba, Col. 10 Ln. 9 – 28).

The notification module of Kloba teaches notifying a client when an *activity related event* occurs. For example, the events that Kloba describes as triggering a notification to a client are receiving an email or fax, or a stock reaching a certain price. These are all related to an activity that a user of a client device (e.g. a cell phone user) would be directly interested in receiving a notification about. These are events related to whether an activity has happened.

The activities that Kloba’s notification module notifies the user about are not related to a file being edited. For example, rather than teaching that the notification module notifies a client when an object related event occurs, Kloba teaches notifying a client when a stock price reaches a certain level. This is an event related to an activity in the real world, not an event related to when a file is edited. Kloba teaches defining no stock price object. Similarly, Kloba teaches notifying a client when an email is received. Again, the receipt of an email or fax is an activity in the real world that a user would be interested in receiving a notification about. The receipt of an email or fax is not the modification of an objection.

Simply put, the notification module of Kloba is a means of notifying a cell phone user when an activity occurs that the user has asked for a notification about. The notification module

is not used to transparently and efficiently manage a cached object without the user's notification. As, Kloba does not teach a notification bond related to a file being edited, Kloba cannot teach persisting such a notification bond through a reboot.

Since Kloba does not teach establishing a notification bond with the server, the notification bond enabling the client to obtain a notification from the server in response to an object related event associated with the original object; wherein the notification bond remains persistent through a reboot of the client and server and the object related event is associated with an edit of the original object; and wherein each object includes a notification bond, Claim 1 is proposed to be allowable. Claims 2-12 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 13 recites in part "establishing a notification bond with the client, the notification bond enabling the client to obtain a notification from the server in response to an object related event associated with an object; wherein the notification bond remains persistent through a reboot and the object related event is associated with an edit of the original object." For at least the reasons presented above, Claim 13 is proposed to be allowable. Claims 14-18 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 19 recites in part "a server configured to manage original objects, the server including a bond manager configured to issue notification bonds to clients, each notification bond enabling a client to obtain a notification from the server in response to an object related event associated with an original object; wherein the notification bonds remain persistent through a reboot and the object related event is associated with an edit of the original

object.” For at least the reasons presented above, Claim 19 is proposed to be allowable. Claims 20-27 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 28 recites in part “a second data field containing entries, each entry being indexed to an object identifier in the first indexing data field and containing states associated with a notification bond between the server and a client that caches the object identified by the object identifier; wherein the first indexing data field and the second data field are created by the server and wherein the server accesses the first indexing data field and the second data field to determine what objects on the client require notification in response to a object related edit event and wherein the notification bond remains persistent through a reboot.” For at least the reasons presented above, Claim 28 is proposed to be allowable. Claims 29-33 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 34 recites in part “a second data field containing entries, each entry being indexed to a server identifier in the first indexing data field and containing states associated with a notification bond between the client and a server identified by the server identifier, the notification bond being associated with a cached object created by the client from an original object; wherein the first indexing data field and the second data field are accessed by a computing device and wherein the computing device uses the first indexing data field and the second data field in updating objects in response to a object related edit event and wherein the notification bond remains persistent through a reboot.” For at least the reasons presented above, Claim 34 is proposed to be allowable. Claims 35-39 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 40 recites in part “notification bond enabling the client to obtain a notification from the server in response to an object related event associated with the original object; wherein the notification bond remains persistent through a reboot and the object related event is associated with an edit of the original object.” For at least the reasons presented above, Claim 40 is proposed to be allowable. Claims 41-49 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 50 recites in part “establishing a notification bond with the server for each of the cached objects, the notification bonds enabling the client to obtain a notification from the server in response to an object related event associated with the original object; wherein the notification bond remains persistent through a reboot of the client and server and the object related event is associated with an edit of the original object; and wherein each object includes a notification bond.” For at least the reasons presented above, Claim 50 is proposed to be allowable.

As amended, Claim 51 recites in part “establishing a notification bond with the server for each of the cached objects, the notification bonds enabling the client to obtain a notification from the server in response to an object related event associated with the original object; wherein the notification bond remains persistent through a reboot of the client and server and the object related event is associated with a modification of the original object; wherein each object includes a notification bond; and wherein the edit to the object is one of an edit to a word processing document, an edit to a spreadsheet document; or an edit to an image file” and “persistently maintaining, by the server, server bond states related to the original objects, the

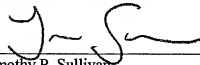
server bond states corresponding to the notification bonds associated with the original objects, each notification bond enabling the client to obtain a notification from the server when at least one of the original object has been modified such that a copy of the original object may be synchronized and maintained on the client after the object has been edited by a user associated with the server.” For at least the reasons presented above, Claim 51 is proposed to be allowable. Claims 52-64 are proposed to be allowable as they depend from a valid base claim.

Conclusion

In view of the foregoing amendments and remarks, all pending claims are believed to be allowable and the application is in condition for allowance. Therefore, a Notice of Allowance is respectfully requested. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact the undersigned attorney for the applicant at the telephone number provided below.

Respectfully submitted,

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